

REMARKS

In accordance with the foregoing, claims 1, 2, 4, 5, 8, 9, 10, 12, 13, 16, 17, 18, 20, 21, 24, and 25 have been amended. Claim 3 has been cancelled. Claims 1-2 and 4-28 are pending and under consideration.

In the Office Action, claims 1-3, 6-11, 14-19, and 22-28 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Pat. No. 5,357,596 (Takebayashi).

According to Takebayashi, it is directed to a speech dialogue system capable of realizing natural dialogue between a system and a human user. According to Takebayashi, a dialogue management unit supplies human character image information (e.g., movement and facial expression of a human) and content visualizing image information. The dialogue management unit performs a semantic determination of the response output content according to the supplied semantic utterance representation by using a dialogue history, a current dialogue state, a dialogue management procedure and a knowledge on specialized application field. See Takebayashi, column 11, lines 6-14. According to Takebayashi, the dialogue management unit determines a dialogue state information which is *indicative of a current state of the dialogue between the user and the system* [emphasis added]. See Takebayashi, column 11, lines 52-58.

According to the present invention, it is directed to a “speaker led” dialogue system in which the response of the recipient of information is changed in accordance with the contents of the “speech” of the speaker to which the recipient is responding. See Specification of the Present Invention, page 2, lines 1-3. Instead of using dialogue sequence information as Takebayashi does, in the present invention, response information is output to a user of the system of the present invention in accordance with an information storage state of slots. The slots include the information items that are required to achieve a particular objective of the dialogue. As a result, a more natural type of dialogue can be maintained with the present invention. Thus, the present invention is not a “computer-led” system whereby a person simply responds to questions asked by a computer.

An aim of one dialogue to be achieved is, for example as described in the summary of the present invention, an airline ticket reservation, which is a kind of service requested by a certain user. The knowledge base, for example in an airline ticket reservation system, stores information relating to flight schedules and reservations as described in the preferred embodiments of the present invention, wherein said information relates to the predefined information items.

The Examiner indicated that the sentence candidate table in Takebayashi corresponds to the knowledge base in previously submitted claim 3 (now cancelled). Applicants have amended claim 1 herein to include the "knowledge base." (i.e., "a knowledge base storing information relating to said predefined information items"). Applicants respectfully submit that the sentence candidate table in Takebayashi is only for extracting information from information entered by a certain user. In contrast, the knowledge base recited in claim 1, for example, is used by the response processor, not by the analyzer. The response processor uses information stored in the knowledge base for checking whether there is inconsistency between information stored in said slots and information stored in the knowledge base. Information stored in the knowledge base is not used for extracting information from information entered by a certain user. In Takebayashi, there is no disclosure or suggestion of the knowledge base.

For example in the airline ticket reservation system, the knowledge base stores information relating to boarding date, departure point, destination, flight name, and number of seats available. These items are required to perform a processing for a service (i.e. reservation) requested by said user. The knowledge base stores, for example as disclosed in Fig. 11 of the present invention, one record including "#123" as the flight name and "Fukuoka" as the destination and another record including "#234" as the flight name and "Osaka" as the destination.

In a case in which a certain user enters information including "#234 to Fukuoka", there is inconsistency relating to the flight name and the destination between the information entered by the user and the information stored in the knowledge base. It is necessary to determine the inconsistency, and determine whether the user intends "#123 to Fukuoka" or "#234 to Osaka" to perform said processing for said service appropriately. It is possible to discover the inconsistency by using information stored in the knowledge base. In Takebayashi, there is no description or suggestion for the structure to use a data storage device corresponding to the knowledge base of the present invention. Thus, in Takebayashi, an inconsistent data "#234 to Fukuoka" will be stored as it was entered, which may cause a problem in performing processing for a service.

Furthermore, in case there is no seat available for the flight designated by the user, there is inconsistency relating to seat availability between information entered by the user and information stored in the knowledge base. However, there is no structure disclosed in Takebayashi to discover such inconsistency of the information.

In summary, although Takebayashi discloses a structure to extract information from

information entered by a user, there is no description or suggestion for an object or a structure to determine inconsistency (the knowledge base of the present invention is used to determine inconsistency as described above) in the extracted information. Therefore, the present invention is not anticipated by Takebayashi, nor is the present invention obvious in light of Takebayashi.

As independent claims 9, 17, and 25 recite similar language, claims 9, 17, and 25 are patentable over the reference for at least the reasons presented above, with respect to claim 1. As claims 2, 6-8, 10, 11, 14-16, 18-19, 22-24, and 26-28 depend from respective independent claims, these claims are also patentable over the reference for the reason offered above with respect to independent claims.

On page 3 of the Office Action, claims 4, 12, and 20 were rejected under 35 U.S.C. § 103(a) as applied to the above-identified claims and further in view of U.S. Pat. No. 5,225,981 (Yokogawa). According to Yokogawa, it is directed to a language analyzer, not a language dialogue system as in the present invention. Thus, Yokogawa, does not teach or suggest, "a knowledge base storing information relating to said predefined information items." As claims 4, 12, and 20 depend from respective independent claims, these claims are patentable over the references, as neither Takebayashi nor Yokogawa, taken alone or in combination, teaches or suggests the above-identified feature of claims 4, 12, and 20, as recited via their respective independent claims.

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

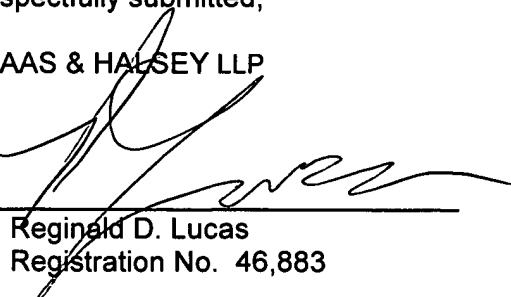
Respectfully submitted,

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